Key Recommendation:
Provide Additional Parks and Open Space

Overview

The parks and natural areas of northeastern Illinois are among our greatest assets, promoting public health, protecting environmental quality, and contributing significantly to the region's identity. A recommended network of parks connected by open space corridors was central to the Burnham Plan, meant at that time to bring refreshment to a newly urban citizenry. This objective is just as important a century later, and Burnham's network remains a work in progress. Less than half of the region's residents currently live in places with adequate access to nearby parks or open space, and many important natural areas remain unprotected. Because the region has expanded well beyond the urban footprint in Burnham's time, the corridors of open space he envisioned must expand as well to preserve areas that have important conservation values.

Our network of parks and natural areas is often called "green infrastructure" because of its similarity to the "gray infrastructure" networks that are likewise central to prosperity and livability. Like other forms of infrastructure, it can be managed, restored, and expanded. A top *GO TO 2040* priority is to expand the green infrastructure network. To do so, CMAP recommends making significant, criteria-based investments in parks and open space. Major benefits will follow from this, including enhanced quality of life and property values, improved public health through the promotion of active lifestyles, and the protection of ecosystem services like water quality and water supply. In brief, the recommended actions are to:

- Provide more parks in developed areas to increase park accessibility.
- Preserve the most important natural areas in the region.
- Provide functional connections between parks and preserves, using the green infrastructure network as a design concept.

The region should work to provide all residents with at least a minimum standard of park access by 2040. The total acreage required for new parks is not extremely high, but it is challenging to provide land in already developed places where it is needed most. Local governments should collaborate to provide additional parks in the areas least served by them, and municipalities in particular should look on redevelopment as an opportunity to provide additional park space even in the context of moderate residential density increases. Such parks can become an important public space that contributes to the overall livability of a community.

The region should preserve an additional 150,000 acres of land over the next 30 years through a collaborative, multi-organizational, public-private approach. At least 100,000 acres should be sought to conserve a network of land and water that follows river corridors and connects major

existing and new preserves in the region – the regional green infrastructure network. Coordinated investment in land protection will be necessary to achieve this. Forest preserve and conservation districts, the state, and private funders should all prioritize land preservation within the green infrastructure network. This will mean reexamining funding criteria and grant scoring systems so that they align with the overarching goal of a connected green infrastructure network.

Another way of establishing connections between parks and preserves is a greenway trail, and the network of such trails identified in the *Northeastern Illinois Regional Greenways and Trails* should continue to be expanded. The region has been very successful in developing off-street trails over the past two decades, and *GO TO 2040* envisions organizations in the region continuing to use the Greenways and Trails establish potential connections between preserves and parks, as well as to support walking and biking as an alternative mode choice. The region's objective should be to double existing greenway trail mileage by 2040.

Municipalities, the region, and the state should harmonize policies with the natural resource protection recommendations in *GO TO 2040*, reducing land consumption and thereby helping protect green infrastructure. At the local level, this means increased attention to networks of open space and important natural areas during municipal comprehensive planning, followed by zoning changes to reinforce that policy direction. Establishing livable communities -- compact, mixed-use places with amenities and transit nearby – will also reduce land consumption on a regional level. While they preserve local natural resources, conservation subdivisions typically do not achieve the broader regional goal of establishing livable communities. Nevertheless, some growth is expected within the green infrastructure network, and there local governments are encouraged to stipulate the use of conservation design. At the state and regional level, efforts should be made to ensure that policies do not inadvertently contribute to the loss of important natural areas.

In summary, the region should, by 2040, be substantially closer to having a fully connected network of protected land and water along river corridors. Park access for all residents of the region should meet at least a minimum standard, and the network of greenway trails should be at least doubled.

Benefits of Parks and Open Space

Open space was noted as a priority in the *GO TO 2040* Regional Vision, which states: "The region's nationally-recognized system of open space – including forest preserves, conservation districts, and parks – will continue to shape regional identity and contribute to the health of our communities. Especially along sensitive waterways, open space will be preserved and expanded, creating green infrastructure networks and enhance people's connection with nature and serve as habitat corridors."

During the 2009 "Invent the Future" phase of *GO TO 2040* public engagement, open space came up in almost every workshop. Participants felt preserving our natural environment was imperative to promote the health of residents and create more livable communities. Participants were also asked to prioritize what outcomes were most important. Land consumption was one of the top four indicators chosen, along with regional economy, transportation choice, and energy reduction. Reducing the loss of open space is clearly a significant concern among residents of the region.

The following subsections describe some primary benefits of parks and open space.

Benefits: Quality of Life and Property Values

Parks and preserves are much coveted amenities that have been shown over and over to be among the top priorities in quality of life surveys. According to a 2002 poll by the Illinois Association of Park Districts, more than 80 percent of residents in Chicago and collar counties said that they visited a park in the past year, averaging more than a dozen visits.[1] Open space is a primary contributor to overall environmental quality, which is desirable in itself, but it also makes the region more attractive to people and businesses considering locating in northeastern Illinois. Its importance can also be seen in its popularity: for example, the county forest preserve and conservation districts have been able to raise about $1.2 billion in current dollars for land acquisition since 1999 through voter referenda on bond issuance.[2] People also vote with their feet, as research indicates that people prefer to live near parks and protected natural areas if the opportunity is available, which translates into property value increases near parks and protected lands.[3]

Benefits: Public Health

Parks and preserves have a number of documented public health benefits.[4] While establishing additional parks only provides an opportunity to engage in recreational activities and does not assure a positive health outcome, parks are indeed associated with improved public health. One study examining total park area within a community found the percentage of total park area within neighborhoods was a significant predictor of increased physical activity levels among children, amounting to a 1.4-percent increase in physical activity levels for each 1 percent increase in park acreage.[5] In another study, subjects who regularly used their local parks were about three times more likely to achieve recommended levels of daily activity.[6] Parks also

improve the equity of public health by providing exercise facilities to low-income residents who may find gym fees prohibitive.[7] Providing nearby opportunities for outdoor recreation also guards against what is figuratively called "nature deficit disorder."[8] In short, parks and open space have measurable positive impacts on health and well-being.

Benefits: Environment

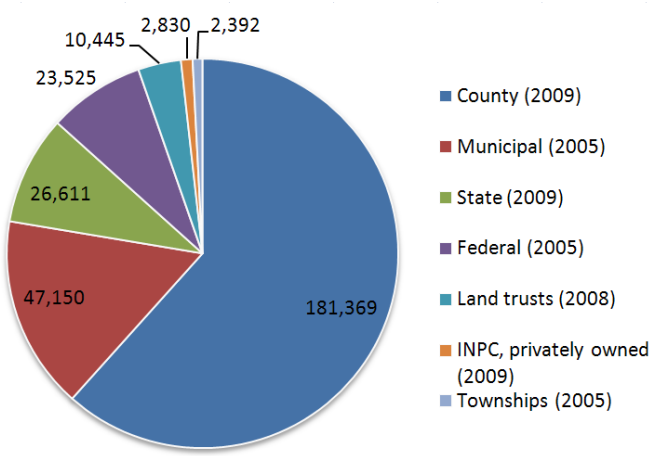
Diagram or rendering of holdings of different types (easements, natural areas associated with conservation design, forest preserves, greenways) interconnecting within Green Infrastructure Vision boundaries – recommend having ASTK do this

One of the most important benefits of protecting land is that it also protects water. Open space helps ensure the replenishment of aquifers with uncontaminated water, which benefits communities that use groundwater as a source of drinking water as well as protecting plants and animals in groundwater-fed wetlands. Furthermore, floodplains and wetlands play a significant role in flood reduction. The Illinois State Water Survey found that for every 1-percent increase in the amount of wetland area in a watershed, peak flood flows could decrease by up to 8 percent.[9] Because climate change may result in increased flooding, it is especially important to preserve floodplains and wetlands in a protected corridor along streams. In another example, wetlands tend to act as "sinks" for nutrients, in most cases removing nutrients from the water flowing through them. These often-irreplaceable natural functions that support human activity are called "ecosystem services," and land protection can help preserve them.[10]

Wildlife benefits from land preservation as well. Protecting large "hubs" of open space connected by corridors ensures species can migrate with relative ease between large blocks of habitat. This is important because, aside from habitat destruction itself, habitat fragmentation is one of the biggest threats to biodiversity in the region. Conservation biologists also suspect that some species will try to migrate northward as climate change progresses, and a north-south network of protected open space may facilitate this movement.

Current Conditions

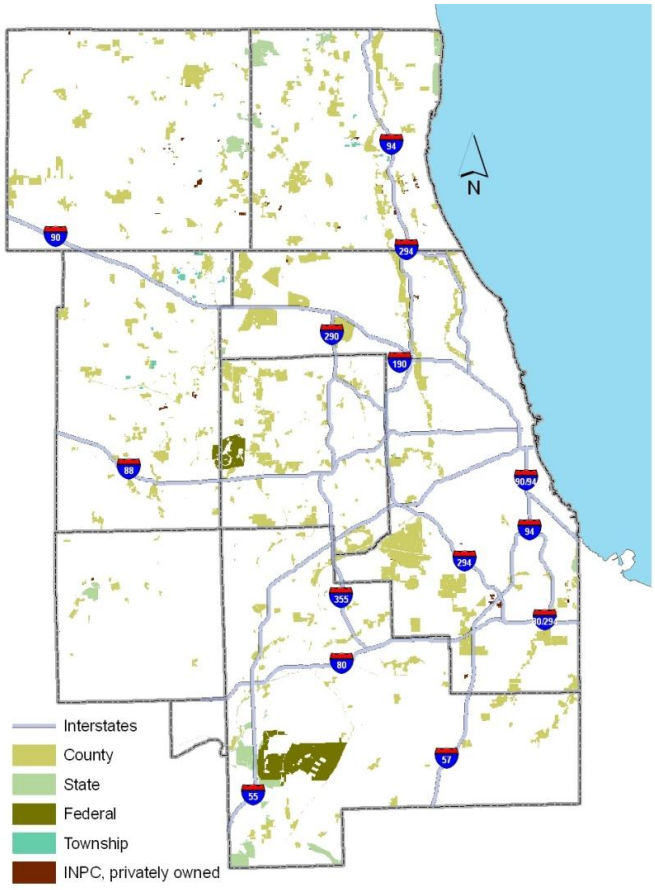
The region now has approximately 300,000 acres in municipal parks, private conservation easements, private nature preserves, county preserves, state and federal holdings, and township parks (Figure 1). Open space can be categorized as conservation-oriented ("preserves" or "natural areas") or recreation-oriented ("parks"), although the distinction is by no means cut and dried. For instance, a number of park districts, which have traditionally focused on recreation, hold natural areas and have conservation programming. The region has about 50,000 acres of recreational open space or parks and about 250,000 acres of conservation open space. There is a third type to consider: a connection or corridor between two or more parks and preserves. This is most often known as a "greenway," but it may simply be a trail or another type of recreational or cultural amenity. CMAP recommends protection and expansion of all three aspects of this regional green infrastructure network.



In terms of acreage, the county forest preserve and conservation districts have the most open space in the region. As distinct units of government, the six forest preserve districts (Cook, DuPage, Kane, Kendall, Lake, and Will Counties) and the conservation district (McHenry County) own and operate over 180,000 acres of public preserves.[11] This is mostly conservation open space but also includes 3,500 acres of golf courses and some additional recreational and farm facilities. Together, these agencies are responsible for the majority of protected conservation open space in the region. The forest preserve and conservation districts protect land through many approaches, including using grant funds for acquisition, accepting donations, and agreeing to manage privately held land under conservation easements. But their main approach is to issue bonds to purchase land, the debt service on the bonds generally being paid through county property taxes.

The Illinois Department of Natural Resources (IDNR) owns about 26,600 acres of public land in the Chicago region. This includes state parks, fish and wildlife areas, natural areas, one state museum property, and several other types of holdings. In addition, IDNR administers several funding programs that other government units, such as park districts and forest preserve and conservation districts, can use for parks and open space. Through the Illinois Nature Preserves Commission (INPC), the State of Illinois also provides support to landowners who wish to dedicate their land as a Nature Preserve or as a Land and Water Reserve. Often nature preserves are owned by a public agency, but sometimes they are not; about 2,800 acres in northeastern Illinois are privately owned Nature Preserves or Land and Water Reserves.

Parks are generally owned and operated by park districts or by the park departments of the region's municipalities. Together they hold approximately 47,000 acres that provide a variety of recreational opportunities from tennis to basketball to cross-country skiing. The townships also own a small amount of land that is usually conservation open space, though it may have a recreational aspect.



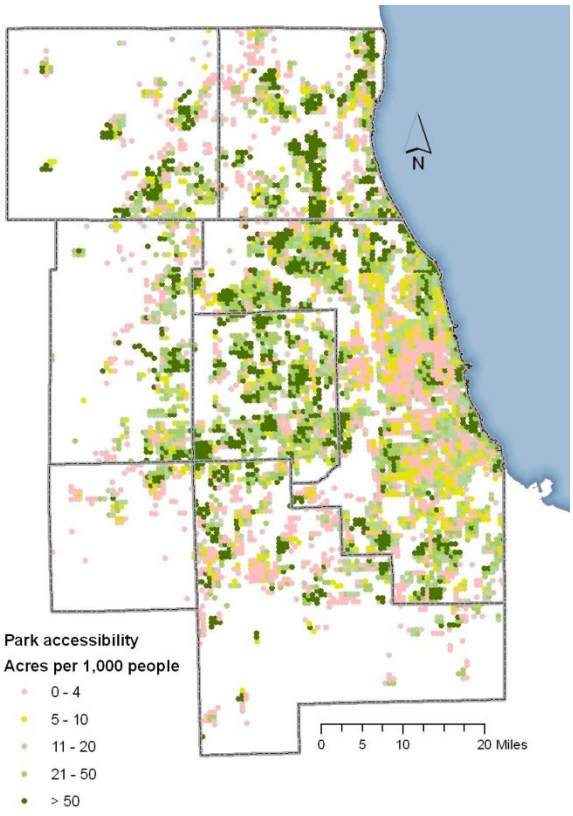
To date, the federal role in open space protection in the Chicago region has been fairly minor in terms of acreage, but it has resulted in the largest single preserve in the region. The U.S. Forest Service owns and operates the Midewin National Tallgrass Prairie, which contains more than 18,000 acres of preserved land in Will County. Most of the land at the Fermi National Accelerator Laboratory in western DuPage County, about 5,400 acres, is also effectively protected open space. Finally, the private sector's role has been increasing over time. Increasingly, nonprofit land trusts own or hold easements on land in northeastern Illinois, and the number of active land trusts has been growing rapidly.[12] Though their acreage is difficult to quantify, trusts are estimated to have bought, accepted donations for, or taken easements on at least 10,500 acres in northeastern Illinois[13] in less than ten years, or about 1,200 acres per year. Typically these land trusts take advantage of tax benefits offered to landowners to forgo development rights by taking out conservation easements of their land, but land trusts also acquire land directly.

Parks and Open Space Recommendations

The following sections describe in detail the actions recommended by CMAP to establish parks, preserve open space, and establish connections within the green infrastructure network.

Recommendations: Parks

The region needs additional parks to provide recreation and open space access to as many people in the region as possible. The total acreage required for new parks is not exceedingly high, but it challenging to provide land in already developed places where it is needed most. Local governments should collaborate to provide additional parks in the areas least served by them, and municipalities in particular should look on redevelopment as an opportunity to provide additional park space even within the context of moderate residential density increases. Such parks can become an important public space that contributes to the overall livability of a community.



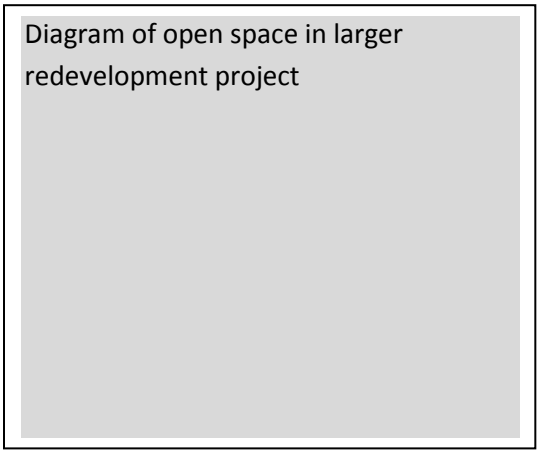
To evaluate the need for urban open space, CMAP evaluated existing parks against standards for park accessibility from the National Recreation and Park Association (NRPA).[14] The park types considered are community and neighborhood parks under NRPA's definitions, rather than regional parks or regional reserves, which correspond to the forest preserves here in Illinois. Based on the NRPA standard of 10 acres per 1,000 people, it was found that only about 49 percent of people in the region have adequate access to park space. Areas with the lowest accessibility are often older and denser, but there are many places in growing areas that do not meet the NRPA standard (Figure X).

Because opportunities are scarce to provide additional parks in some places, however, it probably would not be possible to achieve 10 acres per 1,000 people across the region. In denser areas, this goal is too rigorous. The City of Chicago uses instead a long-term goal of 4 acres per 1,000 people, which is likely an adequate value for the under-parked places within inner-ring suburban areas as well. Still, only 66 percent of people in the region have even this level of service. *GO TO 2040* proposes establishing more parks so that an increasing number of people in the region have adequate park access.

In newly growing areas, park districts acquire the majority of their holdings through donations as stipulated in local land-cash ordinances, which require developers to reserve land for parks

or donate the equivalent in cash. Yet the park accessibility analysis indicates that there are still shortfalls in parks even in developing areas. This seems to suggest that some growing communities may need to adopt best practices in requirements for developer donations.[15] In already developed communities, by contrast, redevelopment over the next thirty years could provide many opportunities to increase open space. One means for this is the use of open space impact fees that apply during redevelopment. Park districts would then use the funding to increase open space access in the area; cash can be especially attractive because it can be used for park development capital projects and as match for state and federal grants.

Since imposing a fee does not solve the problem of the availability of land, a better solution is to require building public open space into site plans during redevelopment, at least in larger projects (Figure X). This is an especially strong possibility in places undergoing the moderate density increases envisioned in the GO TO 2040 plan. As in conservation design (discussed below), it is crucial that the resulting open space be publicly accessible. Even then, however, it will be difficult to develop the kinds of recreational parks (i.e., with opportunities for active recreation) needed in many places without creative ways of local governments directly providing them.



Recommendations: Preserves

CMAP recommends that the region preserve an additional 150,000 acres of land over the next 30 years through a collaborative, multi-organizational, public-private approach. More than this, it is crucial that the preserves function as a connected network of green infrastructure. Therefore at least two-thirds of the total should be targeted to conserve a network of land and water that follows river corridors and connects major existing and new preserves in the region. Coordinated investment in land protection will be necessary to achieve this. Forest preserve and conservation districts, the state, and private funders should all prioritize land preservation within the green infrastructure network. Municipalities and the state should harmonize policies to promote the preservation of green infrastructure. In 2040, the region should be substantially closer to having a fully connected network of protected land and water along river corridors (Figure X), of considerable portion of which has been restored to natural conditions.

Engagement with stakeholders in the conservation community indicated that the Chicago Wilderness Green Infrastructure Vision[16] (GIV) should be the primary conservation basis of the GO TO 2040 Plan. Figure X shows the boundaries of the GIV within northeastern Illinois and the broader Chicago Wilderness area. Developed in 2002–2004 by the Northeastern Illinois Planning Commission and Chicago Wilderness members, including forest preserve and

conservation district professional staff, the GIV is a broad identification of the places in the region ("Resource Protection Areas") considered most significant from a conservation perspective. The GIV Resource Protection Areas identify large preserves linked with a set of open space corridors that generally follow river valleys. In a generalized way, these Resource Protection Areas show where it is most important to protect undeveloped land, restore degraded ecosystems through increased management, provide buffers for protected natural areas, and provide functional connections between protected natural areas. For each of the Resource Protection Areas, the GIV includes a short synopsis of its conservation values, threats to the resources, and the amount of land that could reasonably be protected.

In 2008 and 2009, Chicago Wilderness refined needs estimates for additional land protection within the GIV.[17] These estimates, which come to approximately 100,000 acres in total, reflect best professional judgment of the areas that would be suitable for new preserves or buffers to existing preserves.[18] Protecting this amount of land would bring the region substantially closer to a connected network of green infrastructure by 2040, tending to preserve the most important natural areas in the region. However, these areas within the GIV have not been ranked either for their value in preserving connectivity or for their quality and rarity. Thus there is still a need to prioritize protection of the most important natural areas within the GIV.

While most of the land historically protected in northeastern Illinois is within the GIV, and the *GO TO 2040* plan recommends continuing this trend, there will be additional opportunities to protect land outside it. In addition, the level of importance the public attaches to preserving the landscape, as indicated by CMAP's public engagement efforts as well as by the success of open space referenda, suggests that the overall target for the region should be more ambitious. Over the past twenty years, the forest preserve and conservation districts and the state have acquired or taken management responsibilities for an average of 4,400 acres per year.[19]

Thus, the *GO TO 2040* plan recommends an aggressive but achievable target of 5,000 acres per year on average, or 150,000 acres in total. This is consistent with Chicago area residents' estimated willingness to pay for natural area acquisition or improvement, based on survey research and economic analysis.[20] Two-thirds of the target (or 100,000 acres) should be sought within the GIV Resource Protection Areas. Some of the additional acreage could be protected through state or federal acquisitions and municipal or township park districts. Some could be provided through conservation easements, including easements established as part of a conservation development. It is certain that the private and nonprofit sectors must be called upon to play a growing role in land preservation in northeastern Illinois. However, the emphasis of *GO TO 2040* is on establishing livable communities: compact, mixed-use places with amenities and transit nearby. While they preserve local natural resources, conservation subdivisions typically do not achieve the broader regional goal of establishing livable communities. Nevertheless, some growth is expected within the green infrastructure network, and there local governments are encouraged to stipulate the use of conservation design.

Implementing organizations are also encouraged to look on agricultural preservation as one of the purposes of the Green Infrastructure Vision and land protection in general. While farmland preservation has its own merits in many areas — especially as smaller-scale, near-market, organic farms are a crucial part of local food systems — farming also preserves more environmental benefits than most alternative uses and can be an interim link in the green infrastructure network. However, the primary long-term goal of the Green Infrastructure Vision should be seen as the protection and proper management of natural plant communities.[21]

There have been a number of regional and statewide open space and natural area protection planning efforts in recent years, including the Illinois Wildlife Action Plan (IDNR), the Grand Victoria Foundation's Vital Lands Initiative (which is mostly aimed at land trusts), the Sustainable Natural Areas Plan (IDNR, along with private foundations), as well as the Green Infrastructure Vision and the Biodiversity Recovery Plan. Important sub-regional planning efforts are also taking place, like the Open Space Vision developed by a consortium of organizations working in Lake County. All recognize the importance of preserving land in a connected network and largely follow the pattern in the Green Infrastructure Vision. What remains now is to move beyond planning and to make sure funding programs and preservation activities are aligned with the plans so that all organizations are seeking to protect the most important natural areas and ensure functional linkages between them as part of a green infrastructure network.

Recommendations: Connections

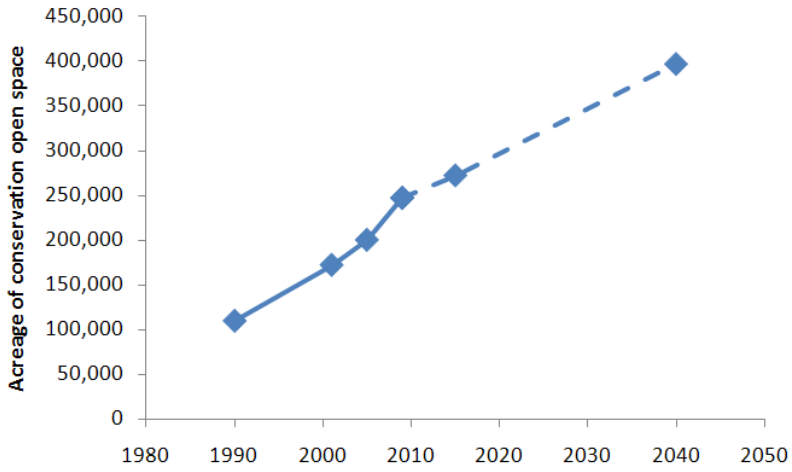
The *Northeastern Illinois Regional Greenways and Trails Plan* has helped guide recreational trail and greenway development for almost twenty years. The Greenways and Trails Plan is a long-range, multi-jurisdictional plan for mostly off-street trails that complements county and other local bikeway plans. Work undertaken for the 2009 update revealed that trail mileage had doubled since 1997, when the Greenways and Trails Plan was last updated. Approximately 500 miles of trails were established in that time period; this is significant progress.

GO TO 2040 envisions organizations in the region continuing to use the Greenways and Trails Plan to support walking and biking as an alternative mode choice, as well as a way of delineating potential connections between preserves and parks. Only some trails are associated with greenways, however. Of the 1,700 miles of new trail facilities proposed in the Greenways and Trails Plan, almost 650 have a greenways component and could serve as a means of connecting parks and preserves. Other kinds of open space connections should not be overlooked. In particular, the Green Legacy projects developed for the Burnham Centennial identified twenty catalytic open space projects within northeastern Illinois[22] that are worthy of pursuit.

Key Indicators

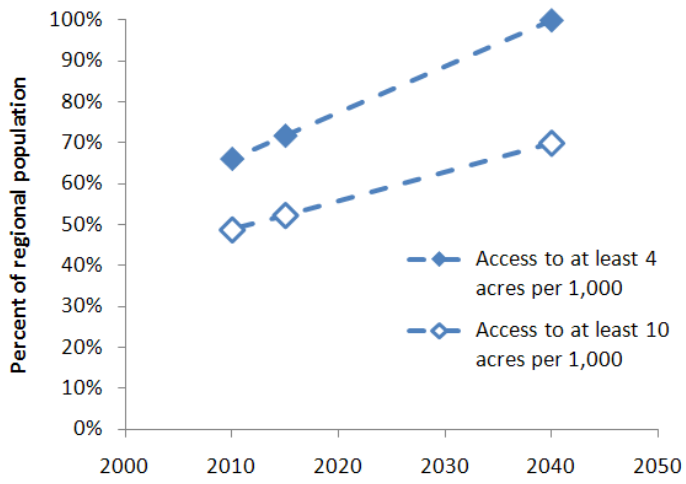
The current amount of conservation open space in the region is approximately 250,000 acres. By 2040, an additional 150,000 new acres should be protected for 400,000 total acres. The interim target for 2015 target should be 25,000 new acres, or 275,000 total acres, or 1/6 of the 2040 target. While this may seem high given fiscal conditions, it is worth pointing out that there is still public appetite for preservation of open space despite the present recession.[23] It is also likely that falling land prices will make acquisition at current rates more affordable than when the business cycle begins rising again. Options available today will be lost with the passage of time and a return to a more robust economy.

- **2015 target:** 275,000 acres of conservation open space
- **2040 target:** 400,000 acres of conservation open space



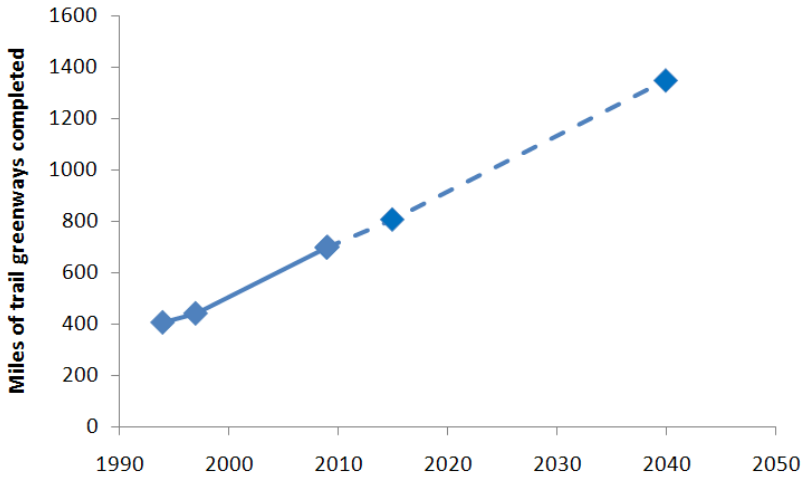
Currently, only 49 percent of people in the region have adequate access to parks, as defined by a standard of 10 acres per 1,000 people. This will not be appropriate for the densest areas of the region, however, which should use a level of service of at least 4 acres per 1,000 people.

- **2015 target:** Seventy-two percent of people in the region should have access to parks at a level of 4 acres per 1,000 people. Fifty-two percent of people in the region should have access to parks at a level of 10 acres per 1,000 people.
- **2040 target:** All people in the region should have access to parks at a level of 4 acres per 1,000 people. Seventy percent of people in the region should have access to parks at a level of 10 acres per 1,000 people.



The region now has 700 miles of trail greenways. The region should approximately double the mileage of trail greenways between now and 2040, for a total of 1,348 miles of trail greenway. An interim target for 2015 is to establish 1/6 of the total recommended new greenway mileage.

- **2015 target:** 808 total miles of trail greenway
- **2040 target:** 1,348 total miles of trail greenway



Implementation area #1: Coordinate open space investment to create a connected regional green infrastructure network

Action	Implementers	Specifics
Prioritize direct land protection within the green infrastructure network	County forest preserve and conservation districts, IDNR	The forest preserve and conservation districts should adopt and periodically update acquisition plans. These acquisition plans should set targets that are consistent with the overall objective of preserving 150,000 acres of land, two-thirds of it within the green infrastructure network. The plans should be oriented toward protecting the areas most important from a natural resources perspective. Other things being equal, a parcel within the GIV boundaries should have substantially higher priority for protection or restoration than a parcel outside it. Furthermore, direct state acquisitions should take into account whether an acquisition opportunity is within the green infrastructure network.
Prioritize parcels within the green infrastructure network in state and private open space grant programs	Foundations, IDNR, land trusts	A replenished Open Land Trust program should have a specific set-aside, or at least a set number of points in a score-based system, to help fill out the green infrastructure network. NAAF should continue to be used as it is to acquire the most important natural areas. Almost all of the candidate properties for the NAAF are likely within the GIV, but location within the GIV *per se* should not be a criterion. OSLAD criteria should be revised to assign points for connectivity with other parks and protected open space. Private foundations that fund open space preservation should make preservation of the green infrastructure network part of their prioritization metrics.
Prioritize development of greenway trails with Transportation Enhancement funds	Local governments, IDOT	Multimodal design ("complete streets") should be the rule, not an exception funded as an add-on through the Transportation Enhancement program. TE can be used for twelve eligible activities including providing bicycle and pedestrian facilities. The development of multiuse, off-street greenway trails identified in the 2009 Greenways and Trails Plan should be the primary use of the TE funds as long as they last.
Refine the Green Infrastructure Vision further	Chicago Wilderness, CMAP, IDNR	The GIV provides a broad, qualitative identification of the lands that are most important to protect and restore. A number of scientific issues remain, however. One is whether it is more important to concentrate on expanding hubs or on linking the hubs with corridors. Another is the actual "least-cost paths" for species migration, as could be determined by quantitative analysis. In short, the revised GIV should help inform scientific preserve design. Furthermore, groundwater and surface water protection should be included more robustly. Finally, it is of the utmost importance that corridors be identified at a finer scale in the next version so that it can guide local development and infrastructure planning.

Implementation area #2: Invest in the establishment of new parks in developed areas

Action	Implementers	Specifics
Foster cooperation between park districts and school districts in dense areas to share use of open space	Park districts, school districts, municipalities	Develop inter-local agreement between the districts, followed by a planning study to determine land and facilities that could be used jointly to meet education and recreational needs, and then by specific improvements to meet identified needs.
Use innovative financing and delivery mechanisms to meet the need for more park space	Municipalities, park districts	Redevelopment can be a major opportunity to provide more park space for a community. Codes can be altered to incentivize developers to provide open space during redevelopment by providing density bonuses, making reinvestment in existing communities more attractive. Furthermore, local governments can ask developers to provide connections to greenways or even trail segments as part of redevelopment. When appropriate, they could also fund park improvements through tax increment financing, considering that parks are known to have a positive effect on the value of nearby properties.
Review land-cash donation ordinances	Municipalities, park districts	Older communities should review their subdivision codes or land-cash donation ordinances to make sure open space donation requirements or in-lieu fees apply during redevelopment, that they are at least 10 acres per 1,000 people (or at least 4 acres per 1,000 in dense areas), and that in-lieu fee values reflect current land values. Municipalities should work closely with park districts in this regard; higher donation requirements coupled with higher allowable densities will tend to encourage compact development. Communities expecting new growth should review their ordinances to ensure they provide rules on land donation to ensure land is well-located. It is also in the public interest to allow developers to donate land in the floodplain; park districts should strongly consider accepting these lands as part of the donation and manage them as passive recreational open space.
Encourage volunteerism and non-traditional staffing at park districts	Park districts	Park districts should actively encourage the creation of conservancies and partner with them to reduce the cost burden of maintenance and park programming while giving more "ownership" to users.
Make OSLAD match requirements sliding scale	IDNR	Local governments in the most "under-parked" areas will frequently find it most challenging to provide the 50% match required for OSLAD. The state should decrease the match required in communities with lower fiscal capacity, as measured (for example) by equalized assessed value per capita.

Implement "urban greening" projects	Municipalities, park districts, county DOTs	Although it does not provide recreational opportunities for the most part, providing more extensive landscaping, tree cover, etc. does make developed areas more attractive and hence more livable. It can help increase access to open space and connect people with nature. Municipalities should build such practices into local infrastructure projects they undertake, such as street and sidewalk reconstruction. They should also review the potential to include requirements for them in new development through local ordinances.

Implementation area #3: Harmonize actions by state and local government with natural resource protection in the GO TO 2040 plan.

Action	Implementers	Specifics
Adopt progressive conservation design ordinances	Municipalities, counties	The most important thing a local government can do to protect open space is to plan for livability, described in more detail elsewhere in *GO TO 2040*'s recommendations; this will reduce overall land consumption. Some development will continue to occur within the green infrastructure network, however. In this case, local governments should require conservation design, resulting in the legal protection of a significant portion of the site through a conservation easement. The protected areas should be fully accessible to the public and linked to any offsite trails. Conservation design should produce site yields equal to or greater than allowable with the underlying zoning, so that gross density does not change. Local governments should adopt a conservation design ordinance based from the *Conservation Design Resource Manual*[24] to make it a by-right form of development. Some consideration should be given to having conservation design requirements apply automatically on sites containing important natural resources, as identified in a local comprehensive plan.
Emphasize the protection of the green infrastructure network in local comprehensive plans	Municipalities	As part of its comprehensive plan, a municipality should (in collaboration with the park district) specifically identify areas preferred to serve as parks, greenways, and natural areas. These areas should be zoned as such in accordance with the municipality's comprehensive plan.
Focus wetland mitigation for transportation projects into the green infrastructure network	USACE, IDOT, Tollway, CMAP	One way of maximizing resources for preservation and restoration within the green infrastructure network is to stipulate that compensatory wetland mitigation required under federal or local ordinances occur within that network. If forest preserve or park districts agree that the green infrastructure network indicates the most important areas to concentrate investment, requiring mitigation in this predefined area could help resolve the problem that entities required to do mitigation are often pressed to find a land management agency willing to take ownership and management responsibilities for the wetlands.
Limit urban infrastructure expansion within the green infrastructure network	IEPA, CMAP	Sewer service should not be permitted in especially sensitive areas of the green infrastructure network. These especially sensitive areas should be precisely defined and identified in a refined version of the Green Infrastructure Vision, after which they should be specifically excluded from the incremental new area added to expanding facility planning areas.

Implementation area #4: Increase funding to achieve the level of park provision and land conservation envisioned in the plan.

Action	Implementers	Specifics
Secure additional dedicated state open space funding	IDNR, advocacy groups	State funding for land acquisition, recreational facility development, and state park operations have declined significantly in the past few years. While a state capital bill was passed in 2009, more significant and stable funding is needed to replenish the state's Open Land Trust account. A set-aside specifically for acquisitions within the GIV and for parks programming in northeastern Illinois would be ideal.
Stop diverting revenue from IDNR programs	State	Despite the dedicated revenue stream, OSLAD and NAAF have been significantly underfunded in recent years. In some years, IDNR has spent less than half of OSLAD and NAAF funds, with the remainder raided for other state budgetary priorities.[25] IDNR had $60 million less in funding in 2006 compared to four years earlier. Diverting RETT funds and raiding the IDNR budget for other state priorities must cease.
Increase involvement by private landowners	Private sector, state	Private land conservation activities must play an increasingly important role in northeastern Illinois, but the state should provide incentives to encourage this, such as a state income tax credit for the donation of a conservation easement. This could help encourage less-wealthy persons to donate easements; it will be necessary for private land conservation to go beyond the wealthy for it to make a significant contribution to the preservation target.
Support direct federal investment in open space	Municipalities, state, counties, NE IL congressional delegation, Chicago Wilderness	Some of the biggest hubs or "macrosites" in the region are based on land protected by the federal government. Direct federal investment in open space in the region is an important form of funding and should be supported. This could happen through the formation of national wildlife refuges and the transfer of appropriate surplus federal property for open space uses, as happened at Midewin National Tallgrass Prairie and Fort Sheridan. Organizations in the region should support these opportunities as they arise.
Increase funding for federal open space grant programs	NE IL congressional delegation, advocacy groups	The federal Urban Park and Recreation Recovery (UPARR) program has not been funded since 2002. It is the only federal program specifically for constructing and rehabilitating local parks, and has been in place for more than three decades. The state portion of the Land and Water Conservation Fund has seen very limited budgetary authorization in recent years.

Implementation area #5: Treat management needs as an important part of landscape preservation

Action	Implementers	Specifics
Restore open space within the green infrastructure network to natural land cover and hydrology	Forest preserve and conservation districts, land trusts	From an environmental viewpoint, the central purposes of protecting the green infrastructure network are to protect water resources and to preserve biodiversity within the region. Ecosystem restoration, which often depends on at least partial reversal of hydrologic modifications, must be a major activity within the green infrastructure network. Local park sites are successfully being redesigned to include smaller green infrastructure practices for stormwater management; this is an important role they can play in the future in addition to providing recreation opportunities.
Devise and commit to a system to prioritize restoration needs based on regional criteria	Chicago Wilderness, CMAP, Illinois Natural History Survey, forest preserve and conservation districts	It is not yet clear which areas are most important for restoration from a region-wide standpoint. Chicago Wilderness or other partners, such as the Illinois Natural History Survey, should develop or simply adapt a system to rank natural areas by the viability and importance of restoring them. Restoration projects by organizations in the region should then be based on these priorities, as should external funding for restoration projects. Standardization of collection and sharing of data on restoration success should be encouraged as part of this system.
Consider purchase of agricultural land as an interim link in the green infrastructure network	Forest preserve and conservation districts	Although the long-term goal is to restore land within the green infrastructure network to natural land cover, it is important to acquire farmland as an interim link. This can be licensed to producers to continue farming, which should be done in accordance with a conservation plan approved by the forest preserve or conservation district. Provision should be made to offset lost tax revenue for other taxing bodies in rural areas.
Support efforts to provide adequate operating budgets for implementing agencies	CMAP, advocacy groups, state	Reconsider statutory restrictions on the ability of park districts and forest preserve and conservation districts to raise property taxes to manage lands they acquire.

Costs and Financing

Most of CMAP's recommendations in the *GO TO 2040* plan involve reallocating existing funds or they simply save money over current practice. The protection of natural areas and the provision of parks, however, is an area where it is important for the region to make an investment in a public good. Federal transportation planning regulations require long-range transportation plans to be constrained to the projected availability of funds. While this is not required for other topic areas, it is sensible in the case of open space. This section therefore provides a conceptual budget with the sources and uses of projected funds.

The preservation target of 150,000 acres is within reach if a number of conditions are met. First, the forest preserve and conservation districts would need to continue to play the primary role in preserving land in northeastern Illinois. Second, private land trusts would need to play a growing role, second only to the forest preserves and conservation districts. In many cases now they work together collaboratively; these partnerships would need to expand even further. Third, conservation design will need to play a significant role, with some conditions attached. Fourth, additional investment by the federal government and by the state beyond existing grant programs will be needed.

About 5,200 acres would be required to meet the targets for park access in already developed areas. This is likewise possible if several conditions are met. First, local governments would need to employ density bonuses or other techniques to encourage the provision of publicly accessible urban open space as part of larger redevelopment projects. Second, park districts would need to continue to employ their bonding authority as they have in the past. Solutions that do not require additional funding, such as sharing open space with school districts, must be part of the approach as well.

Costs and Financing: Forest Preserve and Conservation Districts

Based on their expertise, the portfolio of properties they maintain, and their continued success with open space referenda, the county forest preserve and conservation districts would be the chief implementers of the regional targets for open space. Over the period 1999 – 2009, the county forest preserve and conservation districts issued bonds of $1.2 billion in current dollars, or $124 million per year on an annualized basis.[26] Note that these funding estimates are based on historical revenue covering more than one economic cycle. If the districts are able to maintain this revenue stream, it would provide approximately $3.7 billion in 2010 dollars. As noted in the existing conditions chapter, voters have reliably supported open space bonds.

Not all of this could be used for acquisition, however. Some would be used for other capital programming, such as trails and other facilities, but also major ecosystem restoration projects. If 75 percent on average were used for acquisitions, then approximately $2.8 billion would be available for filling out the green infrastructure network and protecting other important lands. One long-term difficulty for the forest preserve and conservation districts, however, is the strain additional land protection places on operating budgets, which are generally derived from

property taxes. This will be especially true given the increased restoration of land proposed in GO TO 2040. It has proven harder to get voter approval for increases in forest preserve and conservation district tax rates than for bond issues to buy open space, the latter having never failed in the past ten years. Furthermore, limits on tax rates established by statute may affect the long-term ability to manage protected lands.[27]

Costs and Financing: Park Districts

Park districts would be the chief implementers of the recommendation to increase the acreage of parks in developed areas. There are sources of grant financing, such as the OSLAD Program from IDNR as well as the federal UPARR program, which has not received funding appropriations in recent years. Park districts retain the ability to raise their own revenue, however. They issued bonds to buy recreation-oriented open space at a rate of $15.2 million per year between 2000 and 2009.[28] If these rates were to continue, it would provide about $457 million by 2040.

Costs and Financing: Conservation Design

The *GO TO 2040* plan offers policy support to conservation design in the region. This term has come to mean many things to many people, but in this context it means the protection of sensitive natural features on a development site (amounting to 40 – 50 percent of the site preserved) and placing them under an easement. While CMAP emphasizes compact development and moderate density increases in the region, some growth is still expected within the Green Infrastructure Vision boundaries. If conservation design that averaged 40 percent protection of the site were pursued in those areas, approximately 28,000 protected acres would result. This estimate was derived from the projected location of households in the preferred regional scenario for *GO TO 2040* and the anticipated average density of conventional development in those locations. Local governments permitting conservation developments should stipulate that the resulting open space is accessible to the general public and linked through greenways and trails to other publicly or privately held natural areas.

Costs and Financing: State Parks and Open Space Funding

The State of Illinois could contribute to the conservation target for northeastern Illinois in several ways. Existing open space grant programs can provide some resources, but the larger opportunities are likely through direct state acquisition or through a capital bill that would replenish the Open Land Trust account. The main existing grant programs are the Natural Areas Acquisition Fund (NAAF), which is meant to provide funds primarily for land acquisition, and the Open Space Land Acquisition and Development (OSLAD) program, which provides funds primarily for park development. Both are paid from Illinois Real Estate Transfer Tax (RETT) revenue as required by state statute, although in fact these funds have been diverted extensively in recent years and used for other purposes.

The average total statewide revenue from the RETT was $85.5 million per year over 1996 – 2008 in 2010$. The NAAF is funded by a 15-percent set-aside from the RETT and a 35-percent set-aside from the OSLAD program. Currently RETT revenue is very low because of the slack housing market. However, as the housing market picks up, RETT revenues should as well. If average RETT collections to 2040 remain the same (even if they are low in the early years), it would translate into $39 million per year for OSLAD and $13 million for NAAF. Historically 44 percent of NAAF has been spent in northeastern Illinois.[29] This fund is supposed to be used exclusively for acquisition, and would provide $169 million over thirty years to protect the most important natural areas in the region, but it must not be diverted and used for other purposes.

About 69 percent of OSLAD funding has gone to northeastern Illinois historically, and 13 percent of that has gone to the county forest preserve and conservation districts.[30] If these trends continue, OSLAD would provide about $80 million by 2040 for preserves in northeastern Illinois. Most OSLAD funding, however, goes to park districts and municipalities. Approximately 25 percent of OSLAD funding has been used for park land acquisition historically. Assuming that none of the RETT funds are diverted for other purposes, then, OSLAD would provide $135 million for park land acquisition. Note that OSLAD requires a 50 percent match; IDNR should consider

There is also the potential for the state to acquire land directly and operate it as a state park, state conservation area or similar. Most importantly, however, the state could fund the Open Land Trust (OLT) program as it did from 1999 to 2003. The OLT provided $63.6 million for local agencies for the acquisition of 8,735 acres statewide. A small amount of funding was provided to the state for open space acquisition in the 2009 capital bill, but it has not produced significant results in northeastern Illinois. The best new means of financing the OLT program is not clear,[31] but a number of groups have been investigating potential revenue streams.[32] Because the amount the OLT or direct acquisition could fund is unknown, only a small amount of preservation (5,000 acres) is projected for the budget.

Costs and Financing: Parks in Redevelopment

It is estimated that if density bonuses of 10 percent were given to encourage the provision of open space as part of redevelopment projects, it could provide 2,500 acres of urban open space.

Costs and Financing: Private Land Trusts

Nonprofit land trusts have become a major force in conservation across the country, and they own or manage a number of important natural areas in the region. Continuing their present annual rate of land preservation — about 1,200 acres per year on average — would amount to 36,000 acres by 2040. A number of foundations also provide funding for land acquisition, including the Illinois Clean Energy Community Foundation and the Grand Victoria Foundation. *GO TO 2040* also recommends establishing additional incentives for private conservation, such as state income tax credits, to help stimulate preservation activity by land trusts.

Costs and Financing: Conceptual Budget

The following table shows the projected sources of funding[33] for the preservation of important natural areas in the region. The recommended target, again, is 150,000 acres, about two-thirds of which would be devoted to completing the regional green infrastructure network. The budget shows an "equivalent value" for lands preserved. This represents the approximate cost for fee simple acquisition of the land, even though 42 percent of the land under the *GO TO 2040* recommendations would be preserved less expensively by taking out conservation easements.

Sources	Acres	Equivalent value	Cumulative operating cost
County bonds	62,144	$2,782,657,095	$818,743,270
OSLAD	2,523	$80,485,373	$33,241,214
OSLAD local match	2,523	$80,485,373	$33,241,214
LWCF	461	$14,695,717	$6,069,469
NAAF	5,304	$169,200,019	$69,881,195
Conservation design	28,000	$893,200,047	$368,900,000
Land trusts (acquisition, donations, private grants, etc.)	36,000	$1,148,400,061	$474,300,000
Federal (wildlife refuge, etc.)	8,000	$255,200,013	$105,400,000
Direct state investment or Open Land Trust	5,000	$159,500,008	$65,875,000
GO TO 2040 natural area preservation target	150,000	$5,649,046,088	—
Estimate of reasonably expected funds	**149,955**	**$5,583,823,705**	**—**

Note: equivalent value is based on acquisition costs from 2006-2008 average prices paid by each forest preserve or conservation district. Operating costs were assumed to be $850 per acre for each district based on an average taken from the most recent available district budget. Cost estimates based on information from the forest preserve and conservation districts were assumed to be fairly representative of costs for other organizations.

The following table shows the projected sources of funding for parks in already developed areas of the region. The "equivalent value" again represents the approximate cost for fee simple acquisition of the land, even though almost half would be provided through redevelopment. Similarly, the cumulative operating cost represents what would be expected for recreational land owned by a park district. This cost can be reduced by the use of volunteer staffing and encouraging conservancies or neighborhood groups to perform park maintenance.

Sources	Acres	Equivalent value	Cumulative operating cost
Park district bonds	1,720	$457,173,739	$799,771,962
OSLAD	507	$134,658,219	$235,568,798
OSLAD match	507	$134,658,219	$235,568,798
Parks in redevelopment	2,500	$664,520,010	$1,140,645,000
GO TO 2040 park provision target	5,200	$1,366,993,331	—
Estimate of reasonably expected funds	**5,233**	**$1,391,010,188**	**—**

Note: equivalent value is estimated from the 25th percentile of land values in the quartersection where the park would be located. The use of the 25th percentile is meant to account for park districts seeking to purchase less expensive land within their jurisdictions. Operating costs were estimated to be $30,000 per acre, based from FY 2006 revenues and expenditures in a sample of 31 Chicago metropolitan area park districts in the U.S. Census of Governments.

Costs and Financing: Tax Impacts

There is the potential for open space acquisition to reduce the fiscal capacity of taxing districts in the region. In other words, if the state or a county forest preserve or conservation district acquires property, a municipality, township, school district, etc., would forgo the ability to site a taxable use on the property. However, there are several reasons to believe that this effect will be limited. First, many studies suggest that residential land uses, in comparison to commercial, industrial, open space, and agriculture, generate less in local tax revenue than they require in local services.[34] The specific ratio of revenues to costs varies considerably depending on the details of the case, but in general residential land does not "pay its own way." Open space held by a public agency generates no tax revenue, and private land assessed at open space rates[35] generates very little, but these lands also require fewer public services (fire, schools, snow plowing, street lighting, etc.) than residential uses. On balance, the net fiscal impact of open space preservation on municipalities, townships, school districts, and fire districts tends to be more positive than with residential development.

By acreage, most of the new development in the region will be residential. Hence residential development would be the most likely alternative use for the majority of the open space recommended for protection in GO TO 2040, suggesting that the net fiscal impact from residential development under a trend growth scenario would be negative. Industrial and commercial uses, on the other hand, have a strongly positive net fiscal impact.[36] However, these uses tend to cluster along major roads; commercial uses especially tend to locate at the intersections of arterials. Such locations are not generally desirable for preserves, except in the atypical case where there are very important, rare, or high-quality natural communities on site. Thus, while the most common alternative use would be residential, the fiscal impact of residential use will generally be negative; on other hand, the land uses with the most positive net fiscal impact, commercial and industrial uses, tend not to conflict with open space preservation, some counterexamples aside.

The situation is somewhat different with agricultural uses. Agriculture generates local tax revenue and its service costs are very low, so its net fiscal impact is positive, although not very high. More than just a loss of the opportunity to site a higher-value land use, other taxing districts will face loss of current revenue if agricultural land is purchased by a public agency. In those areas where it is a priority to preserve agricultural land, one remedy is for land trusts or other organizations to purchase or accept donations of agricultural conservation easements rather than to pursue fee simple acquisition by a public agency, thus preserving the taxable use. Acquisition by a public agency may still be the best land protection approach for the circumstances, e.g., if it is unlikely that there will be ongoing demand for agricultural use of the property. In that case, the agency will likely license the land to a producer to continue farming. Part of the agency's revenue from the license should be returned to other taxing districts to offset their loss.

A second major reason why fiscal capacity is likely to be maintained even with open space acquisition has to do with the recommended development pattern itself. GO TO 2040

recommends moderate residential density increases, the appropriate level of increase being a matter for local decision. For the same number of projected households, a denser development pattern will tend to limit land consumption. Density also has effects on the ratio between revenue and service cost. For one, the assessed value of an acre of land will tend to go up the more densely it can be developed. For the same tax rate, then, revenue should increase as well. Density also decreases the cost of providing services on a per-household or per-employee basis, at least for physical infrastructure, an effect which is well-established in the literature.[37] Working together, these two effects will tend to offset the reduction in taxable land.

Finally, a third reason why local fiscal capacity would generally be protected even with aggressive land preservation is that open space drives up the assessed value of property nearby. Extensive research has been conducted to validate this effect, which has been known for more than a century.[38] It is not merely the presence of any open space nearby (i.e., developable farm land, forest, etc.), but specifically protected open space.[39] The effect is strongest for community parks, but it also applies to "greenbelts," another name for a connected network of green infrastructure. One researcher has put the premium at 20 percent as a general value for lots abutting or fronting a passive park area; some level of increase can often be detected up to 2,500 feet away.[40] Premiums more or less than this can be expected depending on the circumstances and especially the level of maintenance of the park, with poorly maintained parks or those with security concerns actually being detrimental to property values. This need for maintenance to protect property values is one reason why it is especially important to ensure that park districts are able to raise revenue for operating costs.

On the whole, then, the program of open space preservation and park establishment recommended in *GO TO 2040* would not tend to reduce the fiscal capacity of other local taxing bodies, while offering many benefits to quality of life, public health, and the environment.

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[1] Illinois Environmental Council Education Fund. 2007. "Illinois State Land Conservation Funding." In partnership with The Trust for Public Land and The Nature Conservancy.

[2] From referenda results tracked by Illinois Association of Park Districts, available at http://www.ilparks.org/displaycommon.cfm?an=1&subarticlenbr=9 .

[3] Economic Research Associates. 2005. *Real Estate Impact Review of Parks and Recreation*, http://www.ilparks.org/associations/5112/files/research_era_real_estate.pdf

[4] Summarized in *Parks, Playgrounds, and Active Living,* February 2010. Research Synthesis, Robert Wood Johnson Foundation. Available at http://www.activelivingresearch.org/files/Synthesis_Mowen_Feb2010.pdf.

[5] Roemmich J, Epstein L, Raja S, et al. "Association of Access to Parks and Recreational Facilities with the Physical Activity of Young Children." *Preventive Medicine*, 43(6): 437–441, 2006.

[6] B. Giles-Corti, M. H. Broomhall, M. Knuiman, C. Collins, K. Douglas, K. Ng, A. Lange, R. J. Donovan (2005). Increasing Walking: How Important Is Distance To, Attractiveness, and Size of Public Open Space? *American Journal of Preventive Medicine* 28(2S2):169–176

[7] Erica Gies (2006). *The Health Benefits of Parks: How Parks Help Keep Americans and Their Communities Fit and Healthy.* The Trust for Public Land.

[8] Richard Louv, 2005, *Last Child in the Woods*

[9] M. Demissie and A. Khan. 1993. *Influence of Wetlands on Streamflow in Illinois.* ISWS Contract Report 561. See Table 3, p. 26. Retrieved from: http://www.sws.uiuc.edu/pubdoc/CR/ISWSCR-561.pdf

[10] Robert Costanza et al. 1997. The value of the world's ecosystem services and natural capital. Nature 387: 253-260.

[11] Summarized from 2009 geospatial data provided by forest preserve and conservation districts.

[12] 2005 National Land Trust Census, http://www.landtrustalliance.org/about-us/land-trust-census/census

[13] From data on easements and holdings of nine land trusts over ten years provided by Grand Victoria Foundation, February 19, 2010.
[14] Summarized at http://www.goto2040.org/uploadedFiles/RCP/Strategy_Reports/Parks/ParkAttributes.pdf. Derived from Roger A. Lancaster (Ed) 1983. *Recreation, Park, and Open Space Standards and Guidelines*. Alexandria, VA. National Recreation and Park Association.
[15] Although land-cash donation requirements have not been catalogued for northeastern Illinois, a statewide survey by the Illinois Association of Park Districts suggested that 30% of municipalities (working with park districts) require a donation or cash equivalent of 5.5 acres per 1,000 people, 27% require 10 acres per 1,000, and 5% required 15 acres per 1,000 people. See http://www.ilparks.org/associations/5112/files/land_cash_donation_survey.pdf
[16] http://www.nipc.org/environment/sustainable/biodiversity/greeninfrastructure/
[17] Chicago Wilderness Grant #TR0710: "Integrating the Green Infrastructure Vision into the CMAP Regional Comprehensive Plan" (2008)
[18] Note that the GIV boundaries include 1.8 million acres within the Chicago Wilderness area, including parts of Wisconsin and Indiana as well as northeastern Illinois. Some of this is already protected, while some of it is already urbanized. It is important not to confuse the targets for land protection in northeastern Illinois with the much larger expanse of land that the GIV encompasses within the three-state Chicago Wilderness area. Besides the map shown in Figure X, the GIV also includes a set of concepts that later became the *Sustainable Development Principles for Protecting Nature in the Chicago Wilderness Region*, which are generally consistent with the policy context recommendations in the GO TO 2040 Plan.
[19] Calculated from 2009 shapefiles from county conservation and forest preserve districts, CMAP 2001 Land Use Inventory (version 2 DRAFT), 2005 Land Use Inventory (version 1 DRAFT), and NIPC 1990 Land Use Inventory (version 4).
[20] Kosobud, R. F. (1998) "Urban Deconcentration and Biodiversity Valuation in the Chicago Region," Report to the Chicago Wilderness Project Coalition.
[21] These are the first two key recommendations of the Chicago Wilderness *Biodiversity Recovery Plan* (1999).
[22] http://burnhamplan100.uchicago.edu/history_future/green_legacy_projects
[23] Fairbank, Maslin, Maullin & Associates and Public Opinion Strategies. *Key Findings from National Voter Survey on Conservation*, September 25, 2009.
[24] Northeastern Illinois Planning Commission and Chicago Wilderness. 2003. *Conservation Design Resource Manual: Language and Guidelines for Updating Local Ordinances.* Available at: http://www.nipc.org/environment/sustainable/content.htm#Conservation Design Resource Manual
[25] Illinois Environmental Council Education Fund. 2007. *Illinois State Land Conservation Funding*, http://img.ilenviro.org/attachments/2007ISLCF_report.pdf
[26] From Openlands, 2006, *Forest Preserve and Conservation Districts in Northeastern Illinois: Meeting the Challenges of the 21st Century* and from referenda results tracked by Illinois Association of Park Districts, available at http://www.ilparks.org/displaycommon.cfm?an=1&subarticlenbr=9 . This value includes $100 million in bonding authority given to the Forest Preserve District of Cook County by the General Assembly in 2004.
[27] See 70 ILCS 805/13.1 for tax rate limits for forest preserve districts outside Cook County.
[28] Calculated from referenda results tracked by Illinois Association of Park Districts, available at http://www.ilparks.org/displaycommon.cfm?an=1&subarticlenbr=9 . The referenda questions were examined to determine whether they were primarily for acquisition of recreational land.
[29] Based on list of NAAF acquisitions from 1991 to 2008 provided by IDNR.
[30] Based on list of OSLAD grants made from 1999 – 2009 provided by IDNR.
[31] The Illinois Open Land Trust Act (525 ILCS 33/) does not specify a source of financing for the Open Lands Loan Fund (which can also be used for grants). It previously was funded through state bonds in the Illinois FIRST capital program.
[32] Illinois Environmental Council Education Fund. 2007. *Illinois State Land Conservation Funding*, http://img.ilenviro.org/attachments/2007ISLCF_report.pdf
[33] Note that there are other sources of funding which are considered minor in northeastern Illinois or available only episodically, such as IDNR's hunting-related programs, occasional donations of corporate property as part of settlements for environmental violations, and the Partners in Conservation (Conservation 2000) program, the funding of which has been sporadic and little used for acquisition. These are not included.
[34] See for instance Kotchen, M.J. and S.L. Schulte, 2008, *A Meta-Analysis of Cost of Community Service Studies*, available at http://www.farmlandinfo.org/documents/37969/Meta-analysis_COCS.pdf. This meta-analysis compared the findings of 125 cost of services studies.
[35] See 35 ILCS 200/10-155 and 35 ILCS 200/10‑400
[36] See estimates of net revenue per acre in CMAP Regional Snapshot Report on State and Local Taxation, http://www.cmap.illinois.gov/snapshot.aspx#Tax.
[37] Reviewed in Mark Muro and Robert Puentes, 2004, *Investing in a Better Future: A Review of the Fiscal and Competitive Advantages of Smarter Growth Development Patterns*, Brookings Institution Center on Urban and Metropolitan Policy.

[38] Reviewed in Economic Research Associates, 2005, *Real Estate Impact Review of Parks and Recreation*, http://www.ilparks.org/associations/5112/files/research_era_real_estate.pdf. Also summarized in CMAP *Preserving Parks and Open Land* strategy paper at http://www.goto2040.org/ideazone/forum.aspx?id=724#8514.
[39] J. Geoghegan. 2002. The Value of Open Spaces in Residential Land Use. *Land Use Policy* 19:91-98.
[40] Economic Research Associates. 2005. *Real Estate Impact Review of Parks and Recreation*, http://www.ilparks.org/associations/5112/files/research_era_real_estate.pdf